

CLAIMS

1. A system for managing a change to an item associated with a complex system of inter-related items comprising:

a database comprising a plurality of records, wherein each record includes information concerning an item associated with the complex system, said information including an identification of other items that could be affected by a change to the changed item; and

a computer-user interface displaying a user-updateable list of affected items and a user-updateable list of non-affected items.

2. The system of claim 1, wherein said computer-user interface further includes a user-updateable list of items that require additional analysis before said items can be assigned to either said affected items list or said non-affected items list.

3. The system of claim 2, further including one or more predetermined rules used by the system to automatically assign one or more of said items that could be affected to one of (i) said list of affected items, (ii) said list of items that require additional analysis, and (iii) said list of non-affected items.

4. The system of claim 1, wherein said items include parts used in an assembled end product and documents associated with said assembled end product.

5. The system of claim 1, wherein said computer-user interface further includes a user-updateable input field for receiving an identifier of said item to be changed; and a list of related items that could be affected by a change made to said item to be changed.

6. The system of claim 5, wherein said list of related items is generated automatically in response to a query to said database based upon said identifier of said changed item in said input field.

7. The system of claim 5, wherein said computer-user interface further includes one or more visual indicators associated with said items on said related items list that indicate if said related items are assigned to said list of affected items, said list of items that require additional analysis, and said list of non-affected items.

8. The system of claim 1, further including one or more predetermined rules used by the system to automatically assign one or more of said items that could be affected to one of said list of affected items, said list of items that require additional analysis, and said list of non-affected items.

9. The system of claim 1, further including an "undo" function that allows a human user of the system to retract a previous assignment of an item to either said list of affected items or said list of non-affected items.

10. The system of claim 9, wherein said "undo" function includes reversing any assignments of items made to said list of affected items or said list of non-affected items that were influenced by the assignment of said retracted item.

11. A method of managing changes to items associated with a complex system of inter-related items comprising:

searching a database for items related to a changed item;

assigning each of said related items to (i) an affected items list, (ii) a non-affected items list, and (iii) an analysis required list, depending upon whether each of the related items (i) is affected by a change to said changed item, (ii) is not affected by a change to said changed item, and (iii) requires additional analysis to determine if the related item is affected or not affected; and

wherein said affected items list, said non-affected items list, and said analysis required list, are incorporated into a computer-user interface.

12. The method of claim 11, wherein a human user manually assigns at least some of said related items to said affected items list, said non-affected items list, and said analysis required list; and wherein at least some of said related items are automatically assigned to said affected items list, said non-affected items list, and said analysis required list by pre-established rules applied by computer software.

13. The method of claim 11, further including the steps:
generating a list of related items on said computer-user interface in response to said database search; and
providing a visual indication associated with each of said related items that indicates if said related item has been assigned to said affected list, said non-affected list, and said analysis required list.

14. The method of claim 11, further including the steps:
analyzing items assigned to said analysis required list to determine if said analysis required items would be affected by a change to said changed item;
and
assigning said analysis required items to said affected items list and said non-affected items list, depending upon whether or not said analysis required items would be affected by a change to said changed item.

15. The method of claim 14, wherein said step of assigning said analysis required items is performed manually by a human user.

16. The method of claim 14, wherein one or more of said searching, said analyzing, and said assigning steps are repeated until no items remain on said analysis required list.

17. A system for managing a change to an item associated with an assembled end product, comprising:

a database comprising a plurality of records, wherein each record includes information concerning an item associated with the assembled end product, *said information including an identification of other items that could be affected by a change in said associated item;*

a computer-user interface configured to display a user-updateable list of affected items, a user-updateable list of non-affected items, and a user-updateable list of items requiring additional analysis;

wherein said computer-user interface further includes a list of related items that could be affected by a change to the changed item, said related items list being automatically generated in response to a query of said database; and

wherein said computer-user interface is configured to permit a human user to manually assign items on said related items to said affected items list, said non-affected items list, and said analysis required list.

18. The system of claim 17, further comprising software that automatically assigns at least some of said related items to said affected items list, said non-affected items list, and said analysis required list based upon pre-determined rules.

19. The system of claim 17, further comprising a means for providing a visual indication associated with said related items list on said user-computer interface that indicates whether said items on said related items list have been

assigned to said affected items list, said non-affected items list, or said analysis required list.

20. The system of claim 17, further comprising an “undo” function that de-assigns a previously assigned item from said affected items list, said non-affected items list, and said analysis required list.

21. The system of claim 20, wherein said “undo” function includes reversing any assignments of items made to said list of affected items or said list of non-affected items that were influenced by the assignment of said retracted item.